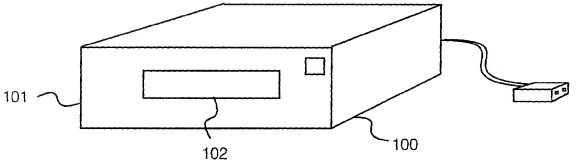

Fig.1

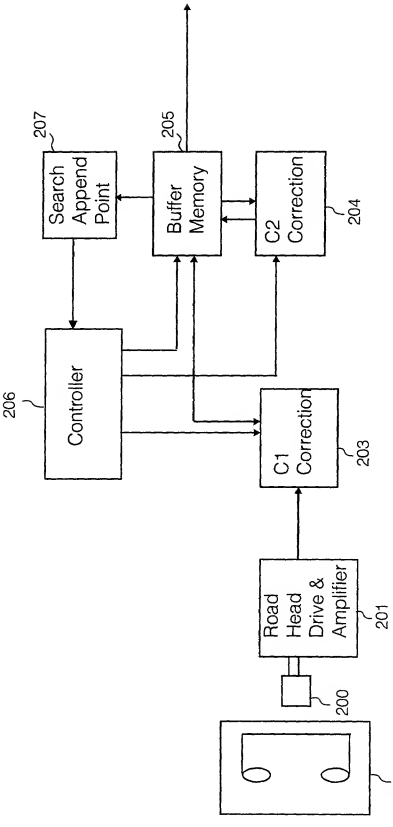
207
Search Append Point
205
Buffer Memory
C2 Correction
204
206
Controller
C1 Correction
203
Road Head Drive & Amplifier
201
200
202

Fig. 2

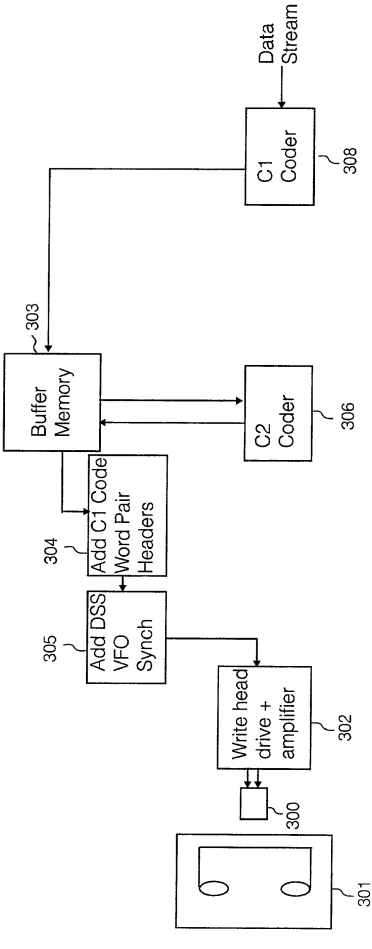
Data Stream
C1 Coder
308
Buffer Memory
303
C2 Coder
306
Add C1 Code Word Pair Headers
304
Add DSS VFO Synch
305
Write head drive + amplifier
302
300
301

Fig. 3

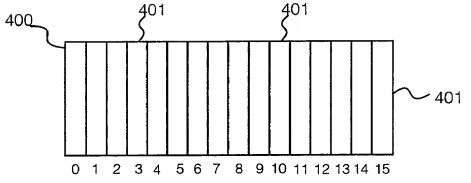
400
401
401
401
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Fig. 4

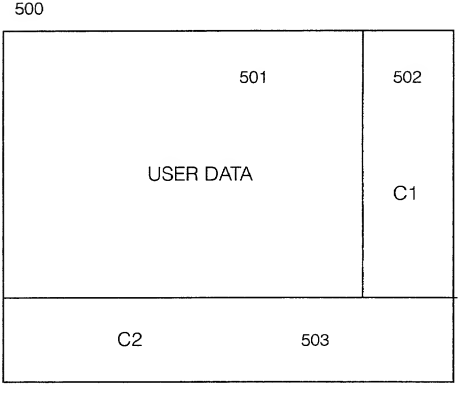
500
501
502
USER DATA
C1
C2
503

Fig. 5

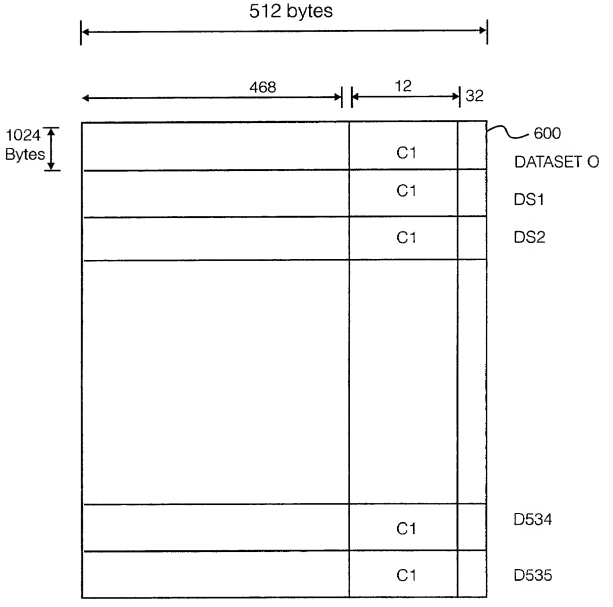
512 bytes
468
12
32
1024
Bytes
600
C1
DATASET O
C1
DS1
C1
DS2
C1
D534
C1
D535

Fig. 6

700

Code Word Pair Header

Byte Position	Length in Bytes	Name of Field
0	2	Code word identifier
2	4	Write pass
6	2	Absolute CQ sequence number (ACN)
8	2	Code word identifier

1009190.2.7.0990

Fig. 7

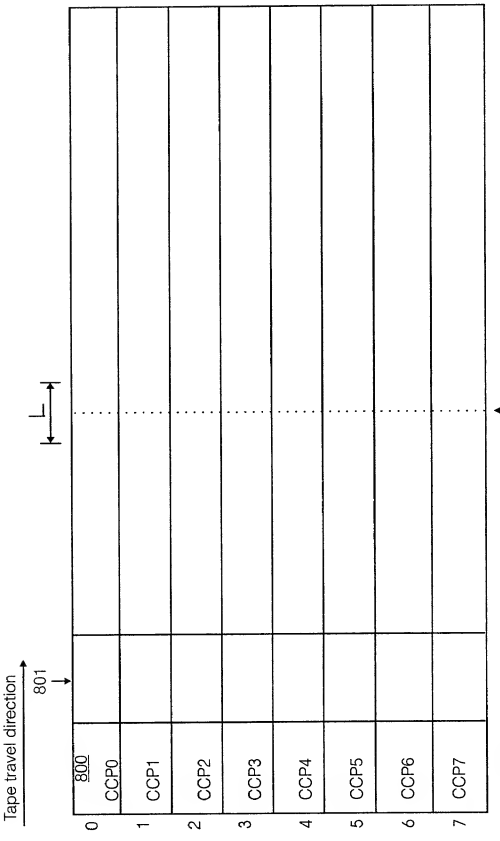
Tape travel direction
801
L
0
600
CCP0
1
CCP1
2
CCP2
3
CCP3
4
CCP4
5
CCP5
6
CCP6
7
CCP7
CCP Set
CQ Set
(802)
Append
Point

Fig. 8

T08T9D' E9ZT886D

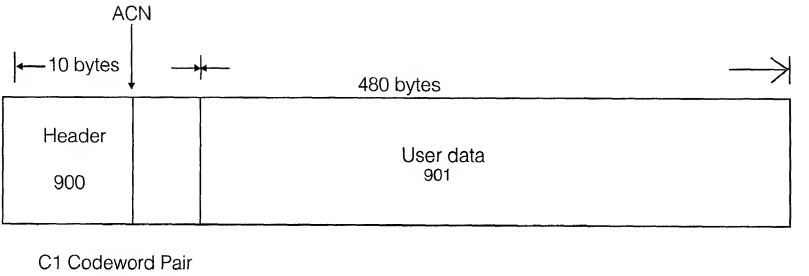

Fig. 9

Title: Searching for append point in data storage device
Inventor: Catharine Anne Maple, Jonathan Buckingham
Ref: 30008377

Interrupt
1000
DSS
VFO
FS
CCPO
RS
CCPI
BS
1006
1007
1003
1001
1004
1002
1005
Synchronized C1 Codeword Quad

Fig.10

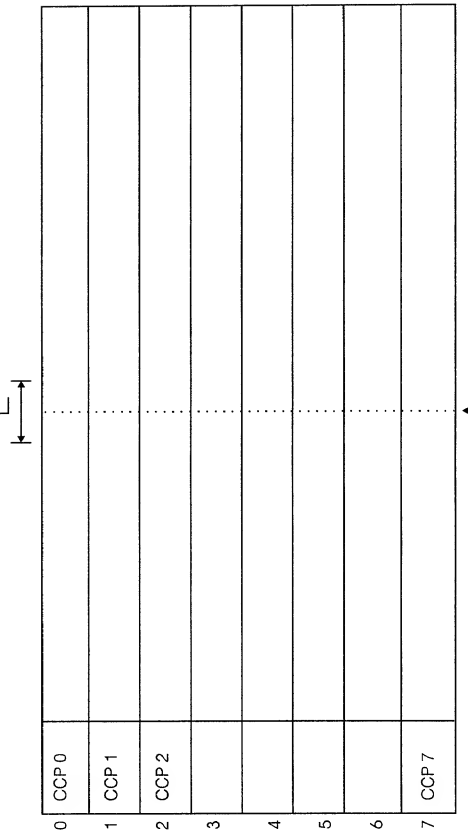

Fig. 11

EP 3 037 980 A1

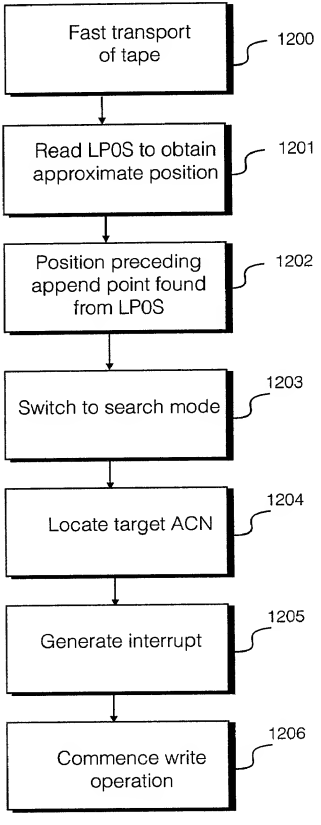
Fast transport of tape
1200
Read LP0S to obtain approximate position
1201
Position preceding append point found from LP0S
1202
Switch to search mode
1203
Locate target ACN
1204
Generate interrupt
1205
Commence write operation
1206

Fig. 12

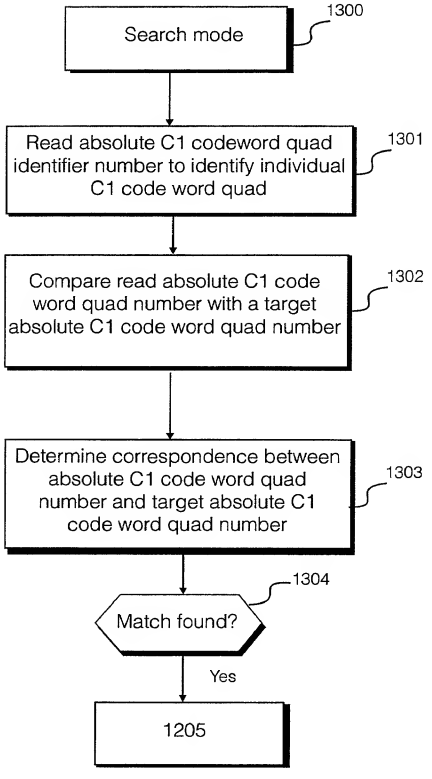
Search mode
1300
Read absolute C1 codeword quad identifier number to identify individual C1 code word quad
1301
Compare read absolute C1 code word quad number with a target absolute C1 code word quad number
1302
Determine correspondence between absolute C1 code word quad number and target absolute C1 code word quad number
1303
Match found?
1304
Yes
1205

Fig.13

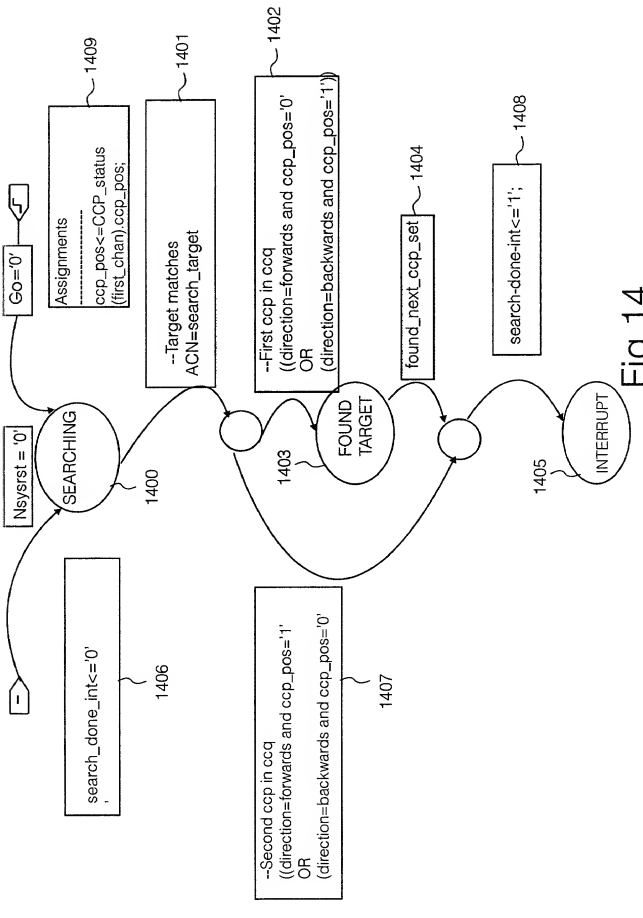
Nsysrst = '0'
SEARCHING
1400
Go='0'
Assignments
ccp_pos<=CCP_status
(first_chan),ccp_pos;
1409
--Target matches
ACN=search_target
1401
--First ccp in ccq
((direction=forwards and ccp_pos='0'
OR
(direction=backwards and ccp_pos='1'))
1402
found_next_ccp_set
1404
search-done-int<='1';
1408
FOUND
TARGET
1403
INTERRUPT
1405
search_done_int<='0'
1406
--Second ccp in ccq
((direction=forwards and ccp_pos='1'
OR
(direction=backwards and ccp_pos='0'
1407

Fig.14